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09/649,499	08/28/2000	William F Jones	26242.00	8209
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Pitts and Brittian PC			EXAMINER	
PO Box 51295 Knoxville, TN 37950-1295			LU, TOM Y	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.   Applicant(s)   Applicant(s)   OnEs, Mplicant(s)   OnEs, Mplicant(s)   Ones, Milliam F	e ·						
Examiner   Tom Y Lu   2621		Application No.	Applicant(s)				
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE of this communication appears on the cover sheet with the correspondence address  Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  The MAILING DATE of THIS COMMUNICATION.  If the period for cityl specified above is less than thirty (30) days, a righty with the staticity reminant of large of the period for cityl specified does the enabling date of this communication.  If the period for cityl specified above is less than thirty (30) days, a righty with the staticity reminant of large of the period for cityl specified whose, the enabling date of this communication, which from the static specified and sp		09/649,499	JONES, WILLIAM F				
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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Horbaschek et al (U.S. Patent No. 4,937,848).

As applied to Claim 1, which is representative of Claim 4, Horbaschek discloses a first digital pipeline latch for receiving said data collected by said positron emission tomograph device (Horbaschek at column 3, lines 35-36, discloses position data is outputted from X-ray tube 1, and transmitted through a line 31 to a computer 11. The lines connected between numeral 13 and multipliers 14-17 inside computer 11 as shown in figure 1, are the claimed "digital pipeline latch". X-ray tube 1 corresponds to the claimed "positron emission tomograph device"); a plurality of multipliers disposed in parallel, each of said plurality of multipliers for receiving and multiplying a portion of said data to generate a product simultaneous with each other of said plurality of multipliers (Multipliers 14-17 as shown in figure 1 receive data from first pipeline latch); a second digital pipeline latch for simultaneously receiving said product from each of said plurality of multipliers (the lines connected between multipliers and adders are the claimed "second digital pipeline latch"); a plurality of adders disposed in parallel, each of said plurality of adders for receiving and summing a plurality of said product from said plurality of multipliers (adders 20 and 21 sum up the outputs from multipliers 14-17); and a third digital pipeline latch

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for receiving data from said plurality of adders (lines between numeral 22-23 and the adders are the claimed "third digital pipeline latch"), said data being representative of a pair of transformed coordinate points from a primary coordinate system to a secondary coordinate system (data output from adders are Ah and Av. Ah and Av are in rectangular coordinate as described at column 4, lines 25-26, which is the claimed "secondary coordinate system". The input data is in polar coordinate as described at column 4, line 30, which is the claimed "primary coordinate system"); whereby as said data is input to said first digital pipeline latch, said product of said data from an immediately previous said event is input to said second digital pipeline latch and completely transformed data from a second immediately previous said data is input to said third digital pipeline latch, and whereby said event data is transformed from said primary coordinate system to said secondary coordinate system in real time (all process steps above are done within computer 11, therefore, the transformation from the primary coordinate system to the secondary

## Allowable Subject Matter

2. Claims 2-3 and 5-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

## Reason for allowance:

coordinate system is done in real time).

- a. Claims 2 and 5 define equations used to produce transformed coordinates from the primary coordinate system to the secondary coordinate system are clearly not taught or suggested by the art of record.
- b. Claim 3 is dependent upon Claim 2.

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c. Claims 6-10 are dependent upon Claim 5.

#### Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Gullberg et al, U.S. Patent No. 5,565,684, see column 7, lines 42-62.

b. Thiel et al, U.S. Patent No. 4,887,211, see figures 3-8.

c. Walters, U.S. Patent No. 4,583,241, see figure 6.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y Lu whose telephone number is (703) 306-4057. The examiner can normally be reached on 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on (703) 305-4706. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Tom Y. Lu June 20, 2003

LEO BOUDREAU

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